

CLAIMS:

1. A method of generating a maximum entropy speech model for a speech recognition system in which:

- by evaluating a training corpus, first probability values $p_{ind}(w | h)$ are formed for N-grams with $N \geq 0$;
- an estimate of second probability values $p_{\lambda}(w | h)$, which represent speech model values of the maximum entropy speech model, is made in dependence on the first probability values;
- boundary values m_{α} are determined which correspond to the equation

$$m_{\alpha} = \sum_{(h, w)} p_{ind}(w | h) \cdot N(h) \cdot f_{\alpha}(h, w)$$

where $N(h)$ is the rate of occurrence of the respective history h in the training corpus and $f_{\alpha}(h, w)$ is a filter function which has a value different from zero for specific N-grams predefined a priori and featured by the index α , and otherwise has the zero value;

- an iteration of speech model values of the maximum entropy speech model is continued to be made until values $m_{\alpha}^{(n)}$ determined in the n^{th} iteration step according to the formula

$$m_{\alpha}^{(n)} = \sum_{(h, w)} p_{\lambda}^{(n)}(w | h) \cdot N(h) \cdot f_{\alpha}(h, w)$$

sufficiently accurately approach the boundary values m_{α} according to a predefinable convergence criterion.

2. A method as claimed in claim 1, characterized in that for the iteration of the speech model values of the maximum entropy speech model, the GIS algorithm is used.

- 92

- add B1

5. A speech recognition system with a speech model generated as claimed in one of the claims 1 to 4.

[illegible]